



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,582	06/23/2003	Tomochika Murakami	00862.023104	5561
5514	7590 10/11/2006		EXAMINER	
	CK CELLA HARPER	AZARIAN, SEYED H		
• •	ELLER PLAZA		ADTIBUT	PAPER NUMBER
NEW YORK, NY 10112			ART UNIT	PAPER NUMBER
			2624	
•			DATE MAILED: 10/11/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	10/600,582	MURAKAMI, TOMOCHIKA	
Office Action Summary	Examiner	Art Unit	
	Seyed Azarian	2624	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tivilian apply and will expire SIX (6) MONTHS from the cause the application to become ABANDON	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).	
Status	•		
Responsive to communication(s) filed on 23 Ju This action is FINAL . 2b)☑ This Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pr		
Disposition of Claims			
4) ☐ Claim(s) 1-34 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-34 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.		
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 23 June 2003 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	\boxtimes accepted or b) \square objected to drawing(s) be held in abeyance. So ion is required if the drawing(s) is object.	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applica rity documents have been receiv ı (PCT Rule 17.2(a)).	tion No ved in this National Stage	
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summar Paper No(s)/Mail [5] Notice of Informal 6) Other:	Date	

Art Unit: 2624

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 15, 17, 19, 21, 23, 27, 29 and 33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. "A computer program functioning as an image processing apparatus", embodying functional descriptive material. However, the claim does not define a "computer-readable medium, memory or computer readable medium encoded with a computer program, such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized and are only statutory when recited as being embodied in a computer-readable storage medium.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.3218 may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Art Unit: 2624

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-34 of current application provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of copending Application No. (10,600,620). Although the conflicting claims are not identical, they are not patentably distinct from each other.

As an example consider claim 1, of current application, compared to claim 1, of copending application, it disclose an image processing apparatus which multiplexes noise on multilevel image data to embed visible additional information with a noise-multiplexed distribution);

first noise multiplexing means for multiplexing noise at a first visible intensity; second noise multiplexing means for multiplexing noise at a second visible intensity different from the first visible intensity;

input means for inputting, as the additional information for a predetermined pixel region unit, information representing which of the first and second visible intensities is used for multiplexing;

determination means for determining on the basis of the additional information which of the first and second visible intensities is used for multiplexing in a pixel region of interest in multilevel image data.

4. Claims 1-34 would be allowable if a terminal disclaimer is timely filed to overcome the obviousness-type double patenting.

Art Unit: 2624

5. The following is an examiner's statement of reasons for allowable subject matter.

Claim 1 representative of claims 7, 8, 10-15, 17, 19, 21, 23-27, 29, and 31-33, providing an image processing apparatus, which multiplexes noise on multilevel image data to embed visible additional information with a noise-multiplexed distribution.

The invention is novel due to the input means for inputting, as the additional information, information representing whether or not to multiplex noise for each pixel, determination means for determining on the basis of the additional information whether a pixel of interest in the multilevel image data is located at a position where noise is to be multiplexed, luminance value calculation means for, when determination means determines that the pixel of interest is located at the position where noise is to be multiplexed, calculating an addition luminance value to be added to the pixel of interest on the basis of a luminance value of a neighboring region near the pixel of interest.

These key features in combination with the other features of the claimed invention are neither taught nor suggested by the art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Azarian whose telephone number is (571) 272-7443. The examiner can normally be reached on Monday through Thursday from 6:00 a.m. to 7:30 p.m.

Art Unit: 2624

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu, can be reached at (571) 272-7443. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR.

Status information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Seyed Azarian
Patent Examiner
Group Art Unit 2624
October 2, 2006

Sezed ayrum